

R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments can be found in claim 14 and page 34 lines 18-20, as originally filed. Thus, no new matter has been added and no new issues are believed to be raised for the independent claims.

OBJECTION TO THE DRAWINGS

Replacement sheets for FIGS. 1-5 including "Conventional" legends were submitted with the October 15, 2003 Amendment in accordance with MPEP §608.02(g). The language "such as" used in MPEP §608.02(g) indicates that the legend "Prior Art" is not mandatory. The Examiner is respectfully requested to either (i) clearly indicate why the replacement sheets for FIGS. 1-5 are objected to or (ii) withdraw the objection. Regarding the request for information, the contents of FIGS. 1-5 include information known to the Applicant at the time of the invention.

CLAIM REJECTION UNDER 35 U.S.C. §112

The rejection of claims 1-15 and 17-21 under 35 U.S.C. §112, first paragraph, for failing to comply with the written

description requirement is respectfully traversed and should be withdrawn.

The rejection of claims 4, 18 and 19 under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the subject matter has been obviated by appropriate amendment and should be withdrawn.

Claim 1 provides a frame comprising a plurality of packets wherein at least one of the packets has a header section having a plurality of identification portions. FIG. 11 and the associated text on page 35, line 14 thru page 37, line 11 of the specification disclose an example header 204a having at least a Fragment Identification 288 (e.g., a first identification portion) and a Packet Identification 280 (e.g., a second identification portion). Therefore, one of ordinary skill in the art would understand that the Applicant had possession of the claimed invention at the time the application was filed. Claims 2-15 depend from claim 1. As such, claims 1-15 are fully compliant under 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

Claim 5 provides a downstream node configured to determine that an upstream node is faulty based on a payload error portion. A conventional approach for transmitting a frame is illustrated in FIG. 5 and the associated text on page 11, line 12 thru page 12, line 16 of the specification. In the conventional

approach, a faulty upstream node may create bit errors in user data of the frame. The bit errors are hidden from a downstream node by the fault upstream node recalculating a payload CRC for the faulty user data prior to transmission to the downstream node. The present invention generally provides an approach using a separate header CRC for header data and not recalculating the payload CRC. As such, the downstream node may detect the fault user data that no longer matches the payload CRC, as disclosed on page 17, lines 6-10 of the specification. An example of a header CRC 272 and a separate payload CRC 280 is illustrated in FIG. 10 of the specification. Therefore, one of ordinary skill in the art would understand that the Applicant had possession of the claimed invention at the time the application was filed. Claims 6-9 depend from claim 5. As such, claims 5-9 are fully compliant under 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

Claim 17 provides a step for adding a header section having a plurality of identification portions and a header error portion to each of a plurality of packets received at an upstream node of a plurality of nodes. The step of adding the header section may be found in the specification on page 23, lines 9-15. The plurality of identification portions is generally disclosed in the specification in FIG. 11 and the associated text on page 35, line 14 thru page 37, line 11 as discussed above for claim 1.

Adding a payload error portion to each packet without a payload error portion may be found on page 21, lines 7-11 of the specification. In particular, page 21, lines 7-11 of the specification indicate that ATM cells and "any other protocol data" may be transmitted via SONET frames under the present invention. One of ordinary skill in the art would understand that a 53-byte ATM cell does not have a payload CRC (e.g., payload error portion) for the payload bytes as illustrated in FIG. 2B of Dove et al., U.S. Patent No. 6,169,749 (already considered in the present application). Therefore, one of ordinary skill in the art would understand that the Applicant had possession of the claimed invention at the time the application was filed. Claims 18-21 depend from claim 17. As such, claims 17-21 are fully compliant under 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1-4 and 6-20 under 35 U.S.C. §102(a) as being anticipated by "Simple Data Link (SDL) protocol: An Efficient and Lower Complexity Data Link Protocol for High-Speed Packet Networks" by Doshi et al. (hereafter Doshi) is obviated in part and is respectfully traversed in part and should be withdrawn.

Doshi concerns a simple data link (SDL) protocol as an efficient and low complexity data link protocol for high-speed

packet networks (Title). In contrast, claim 1 provides (in part) at least one packet having both (i) a header section having a plurality of identification portions and (ii) a header error portion. Despite the assertion on page 5, section 16 of the Office Action, Doshi appears to be silent regarding both a plurality of identification portions and a header error portion in a header. In particular, if a PDU length indicator and a Header Error CRC in Figure 2 of Doshi are similar to the claimed plurality of identification portions, Doshi appears to be silent regarding a header error portion. If the Header Error CRC in Figure 2 of Doshi is similar to the claimed header error portion, Doshi appears to be silent regarding a plurality of identification portions. Therefore, Doshi does not appear to disclose or suggest at least one packet having a header section having a plurality of identification portions and a header error portion as presently claimed.

Claim 1 further provides a label portion located before a header error portion. Despite the assertion on page 6, section 24 of the Office Action (arguing claim 14), the text on page 1296, left column, lines 14-16 of Doshi appear to be silent regarding an MPLS label (asserted similar to the claimed label) being located before a header CRC or other field possibly similar to the claimed header error portion. Therefore, Doshi does not appear to disclose or suggest a label portion located before a header error portion as

presently claimed. Claims 16 and 17 provide language similar to claim 1. As such, the claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 16 further provides a packet comprising a header length. Despite the assertion on page 6, section 25 of the Office Action, the text on page 1297, right column of Doshi does not appear to state that a PDU length indicator is for the SDL header. In particular, the text on page 1296, right column of Doshi reads, "PDU Length Indicator (PLI) Field: It indicates the size, in octets, **of the framed PDU** (e.g., an IP datagram)." (Emphasis added) Furthermore, page 1297, left column of Doshi states that a "framed PDU" is carried in an Information field. Figure 2 of Doshi shows that the Information field is part of an SDL **payload**. As such, the PDU length of Doshi appears to concern the payload only, not a header length. Therefore, Doshi does not appear to disclose or suggest a packet comprising a header length as presently claimed. As such, the claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 6 provides (from claim 5) one or more of a plurality of nodes is an upstream node configured to transfer a frame and one or more of the plurality of nodes is a downstream node configured to determine that the upstream node is faulty based on a payload error portion. In contrast, the Office Action admits on page 5, section 28, "Doshi et al. does not specifically disclose

that an upstream node transmits the packet and downstream node identifies the faulty upstream node." Therefore, Doshi does not disclose or suggest one or more of a plurality of nodes is an upstream node configured to transfer a frame and one or more of the plurality of nodes is a downstream node configured to determine that the upstream node is faulty based on a payload error portion as presently claimed.

Claim 6 further provides discarding at least one packet upon detecting an error. Applicant's representative respectfully traverses the assertion on page 6, section 18 of the Office Action that discarding information with errors is inherent. Inherency requires certainty of results, not mere possibility (See, e.g., *Ethyl Molded Products Co. v. Betts Package, Inc.*, 9 U.S.P.Q. 2d 1001 (E.D.Ky 1988). See also, *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981)). In contrast, page 1297, left column, lines 3-5 of Doshi state, "The CRC polynomial allows correction of all single bit errors and detection of multiple bit errors in the SDL header." Doshi discloses that information with an error **can be repaired instead of discarded**. Furthermore, the Office Action admits on page 8, section 34 that "it is true that single bit errors **can be corrected** by the CRC polynomial..." Thus, discarding information with errors does not appear to be a certainty and thus is not inherent. Therefore, Doshi does not appear to disclose or suggest discarding at least one packet upon

detecting an error as presently claimed. Claims 7-9 also depend from claim 5. Claim 20 provides language similar to claim 6. As such, claims 6-9 and 20 are fully patentable over the cited reference and the rejection should be withdrawn.

Claim 8 provides at least one packet comprising a first address portion having one or more addresses located before a header error portion. In contrast, Doshi appears to be silent regarding one or more addresses **located before a header error portion** as presently claimed. Furthermore, the argument on page 5, section 19 of the Office Action is moot for arguing language different than the amended claim 8. As such, claim 8 is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 9 provides at least one packet comprising a data identifier located before a header error portion and configured to identify a data type. In contrast, Doshi appears to be silent regarding a data identifier **located before a header error portion** and configured to identify a data type as presently claimed. Furthermore, the argument on page 5, section 19 of the Office Action is moot for arguing language different than the amended claim 9. As such, claim 9 is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 21 provides a step for framing at least one of a plurality of packets with a Simple Data Link protocol including a

packet length portion and a packet length error portion. In contrast, Doshi appears to be silent regarding encapsulating an SDL frame (asserted similar to the claimed at least one packet) within another SDL frame. Therefore, Doshi does not appear to disclose or suggest a step for framing at least one of a plurality of packets with a Simple Data Link protocol including a packet length portion and a packet length error portion as presently claimed. As such, claim 21 is fully patentable over the cited reference and the rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claim 5 under 35 U.S.C. §103(a) as being unpatentable over Doshi in view of Bergman et al. '694 (hereafter Bergman) is respectfully traversed and should be withdrawn.

Doshi concerns a simple data link (SDL) protocol as an efficient and low complexity data link protocol for high-speed packet networks (Title). Bergman concerns a fault isolation for communications network for isolating the source of faults comprising attacks, failures, and other network propagating errors (Title). In contrast, claim 5 provides a downstream node configured to determine that an upstream node is faulty based on a payload error portion of a packet. Page 6, section 28 of the Office Action admits that Doshi does not disclose a downstream node identifying a faulty upstream node. FIG. 6 of Bergman appears to

teach a downstream node adjusting an upstream node status based on an arrival of an alarm message from the upstream node **relative to a time window** T to $T+T^{\text{MEAS}}$. Both Doshi and Bergman appear to be silent regarding the faulty determination being **based upon a payload error portion of a packet**. Therefore, Doshi and Bergman, alone or in combination, do not appear to teach or suggest a downstream node configured to determine that an upstream node is faulty based on a payload error portion of a packet as presently claimed.

Furthermore, the assertion on page 8, section 35 of the Office Action, "While it is possible that the teaching of using the payload error portion of the packet as the indication of the faulty node does not appear in Doshi or Bergman, one of ordinary skill in the art at the time of the invention was made would use any available indication in the packet to indicate a faulty node" appears to be a conclusory statement. In particular, **no evidence** is offered in the Office Action that "any available indication in the packet" would be obvious for use in indicating a faulty upstream node. The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness (MPEP §2143.01). As such, claim 5 is fully patentable over the cited references and the rejection should be withdrawn.

COMPLETENESS OF THE OFFICE ACTION

Aside from a notice of allowance, Applicant's representative respectfully requests any further action on the merits be presented as a **non-final** action. In particular, 37 CFR §1.104(b) states:

(b) *Completeness of examiner's action.* The examiner's **action will be complete as to all matters**, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters of form need not be raised by the examiner until a claim is found allowable. (Emphasis added)

Furthermore, MPEP §2163, paragraph III states:

The above only describes how to determine whether the written description requirement of 35 U.S.C. 112, para. 1, is satisfied. **Regardless of the outcome of that determination, Office personnel must complete the patentability determination under all the relevant statutory provisions of title 35 of the U.S. Code.**

Once Office personnel have concluded analysis of the claimed invention under all the statutory provisions, **including 35 U.S.C. 101, 112, 102 and 103**, they should review all the proposed rejections and their base to confirm their correctness. (Emphasis added)

Claims 3 and 17-20 were rejected under 35 U.S.C. §102(a), yet no arguments were provided in the Office Action in support of the rejections. The rejection to claims 7-9 appear to be a cut-and-paste from the prior Office Action and do not account for the amended language. Furthermore, claim 21 (newly added in the prior Amendment) has no rejection under 35 U.S.C. §102 and/or §103 contrary to MPEP §2163. As such, the Action mailed January 15, 2004 is not complete.

Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicant's representative should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge our office Account No. 50-0541.

Respectfully submitted,
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